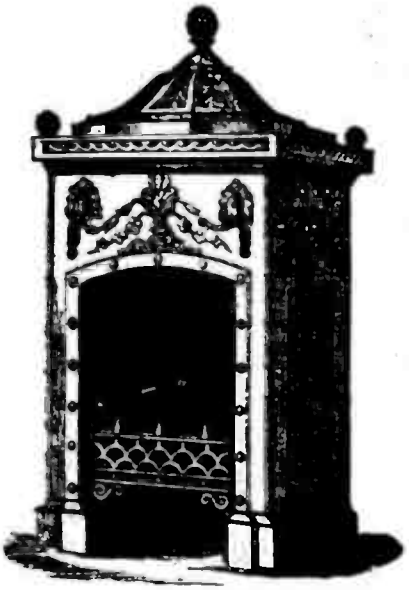


PIERCE'S IMPROVEMENTS IN STOVE-GRATES;

FOR

WARMING AND VENTILATING CHURCHES, CHAPELS, INFANT AND OTHER SCHOOLS, ENTRANCE HALLS, INVALIDS' APARTMENTS, &c. &c.

THE ORIGINAL and only PURE WARM-AIR STOVE constructed wholly of FIRE LOAM, without any admixture of IRON with which the air can possibly come in contact during the process of warming, is

PIERCE'S NEWLY-INVENTED

PYRO-PNEUMATIC, WARMING, AND VENTILATING STOVE-GRATE,

For which the SOCIETY OF ARTS awarded their LARGE SILVER MEDAL to the INVENTOR, in the Session 1849, after having had the Grate in *daily use several months*, during the Exposition of Manufactures, where it was universally admired, and the Prize Medal presented by His Royal Highness Prince Albert, at the distribution of prizes in that year; the superiority of which over every other grate is now fully admitted by all persons who have seen it: thus, ROBERT HUNT, Esq., Professor of Natural Philosophy of the Geological Museum, Jermyn-street, in his Guide-Book to the Great Exhibition, when speaking of Stove-Grates, makes the following remarks:—

"The *Pyro-Pneumatic Stove* (107) is, from its peculiar construction, worthy of close inspection. The whole of the interior is made of fire-clay, moulded in various pieces, and so arranged that passages or air-ways pass through them. The Stove may therefore be regarded as formed *entirely of fire-brick*, and, as the passages are all connected with a pipe leading to the external air, that which they contain being warmed, rises into the apartments, and are supplied with *fresh air from without*. The fire is connected with the ordinary chimney, and the products of combustion are carried off by that channel; the necessary oxygen being freely obtained from the air which flows into the apartment, warmed, through openings in the top of the exterior case. By this arrangement a *more effective system of ventilation* is established, the deteriorated air passing off by the chimney, and a constant supply of fresh air of a genial warmth unceasingly flowing into the room in such a manner that no sensible draught is experienced."

To show the injurious effects of using iron (as in all other Stove Grates) as a medium of transmitting warmth, the following extract is made from the same work:—

"As *cast-iron always contains*, besides the metal itself, more or less *carbon, sulphur, phosphorus*, or even *arsenic*, it is possible that the smell of air passed over it in an incandescent state, may be owing to some of these impregnations; for a quantity of *noxious effluvia*, inappreciably small, is capable of affecting not only the *olfactory nerves*, but the *pulmonary organs*."

"There are, however, other causes at work, producing consequences to which may probably be referred many of the peculiarities which belong to air warmed by contact with *hot iron*. *Experiment* appears to show that the electric condition of the air is *materially changed* by the action of a *heated metal surface* upon it. It is therefore desirable, in all stoves, that means should be provided to prevent any undue warming of the outer casing, and that ventilation be particularly attended to."

PIERCE'S PYRO-PNEUMATIC STOVE is the most powerful and economical grate that has yet been submitted to public notice, constantly burning with the clear, OPEN, CHEERFUL, RADIATING FIRE (not being at any time an enclosed stove), requires no attention or management, cannot be put out of repair (as its principle of construction is wholly self-acting), and distributing in all portions of the space in which it is placed the benefits of PERFECT WARMTH with HEALTHFUL VENTILATION, and is made of various sizes, so as to provide the requisite quantity of warmth and circulation of air, at the very moderate cost of £7., £9. 10s., £13. 10s., &c., according to the size of the stoves, the spaces they are intended to warm, and the degree of decorations or style of finish that may be required, the designs being by the first architects of the day.

REFERENCES may be made where the PYRO-PNEUMATIC STOVE-GRATES have been erected and highly approved, at the Mansions, Houses, Residences, &c., of

Arnold Rogers, Esq., Hanover-square.
Sir Wm. Codrington, Bart., M.P., Dodington House.
Rev. G. R. Cornish, Ashburton, Devonshire.
G. Poulet Scrope, Esq., M.P., Castle Combe, Chippenham.
Messrs. Dent and Allcroft, Wood-street.
Messrs. Marshall and Snelgrove, Vere-st. and Oxford-st.
Guy's Hospital, in the Lecture Room and Theatre.
Messrs. Alexander and Co., 40, Lombard-street.
University Hall, Gordon-square.
Lloyd's Registry of Shipping, Cornhill.
Chapter Clerk's Office, Westminster Abbey.
The Rev. Mr. Martin, Westminster Chapel, Buckingham-gate.
Congregational Chapel, City-road.
Churches of Wargrave and Shiplake, near Reading.
Bilsdale Church, Yorkshire.
Church of St. German's, near Port Eliot, Cornwall.
Grammar School and Sessions-House, Lincoln.
Vestry Clerk's Offices, St. Pancras.
Office of "The Builder," corner of York-street, Covent Garden, &c. &c. &c.

THE OPINIONS of the PUBLIC PRESS and Scientific Journals, have been universally given in favour of this Stove, for which see—

The Art Journal, for March 1849; *Literary Gazette*, of Feb. 3, 1849; *Standard*, Feb. 8, 1849; *Herapath's Railway Journal*, Feb. 10, 1849; *The Tablet*, Feb. 3, 1849; *Ladies' Newspaper*, Feb. 3, 1849; *Railway Chronicle*, Feb. 3, 1849; *Morning Post*, Feb. 16, 1849; *Observer*, Feb. 11, 1849; *Morning Herald*, Feb. 17; *John Bull*, Feb. 10, *St. James's Chronicle*, Feb. 10, 1849; *Historic Times*, Feb. 23; *British Army Despatch*, April 20, 1849; *Mining Journal*, March 17, 1849; *Civil Engineer and Architect*, March 1; *Weekly News*, Feb. 3, 1849; *The Builder*, March 3, 1849; *Journal of Public Health*, March 1, 1849; *Magazine of Science*, for March 1849; *Railway Times*, Feb. 9, 1850.

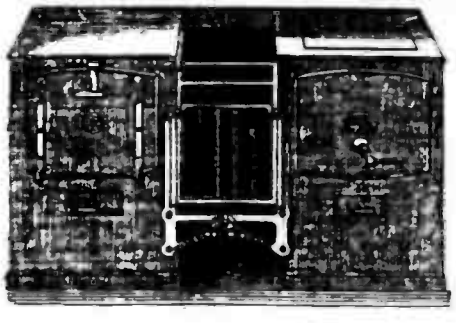
"The *Pyro-Pneumatic Stove Grate* exhibited by Mr. PIERCE is entitled to high commendation, and its merits may, in many cases, be most usefully employed; there is no question *this Stove is one of the best* that can be used for warming large spaces, such as *churches, schools, public buildings, &c.*—*Illustrated London News*, June 14, 1851.

PIERCE'S ECONOMICAL RADIATING STOVE-GRATES,

WITH ORNAMENTAL HEARTHS AND FENDERS, QUITE UNIQUE, ADAPTED TO THE DECORATIONS OF ANY ROOM FOR WHICH THEY MAY BE DESIRED.

The RADIATING PRINCIPLE, upon which all these Grates are constructed, is that of producing the GREATEST DEGREE OF WARMTH with the LEAST WASTE OF FUEL. The Cleanliness, Comfort, Economy, Prevention of Smoke, and correct style of Architecture, with FIRST-RATE FINISH, has obtained for them the most extensive patronage. The superiority of the RADIATING STOVE-GRATE arises chiefly from the heat being prevented from uselessly diffusing itself; in addition to which, the Fire Lump, being a slow conductor of heat, this important agent is necessarily radiated over the apartment; and it is a remarkable fact attending these Grates, that, when the Fire Lump becomes hot, it retains the heat acquired much longer than any metallic body possibly can do, and consequently imparts warmth to the room for many hours after the fire has been out.

PIERCE'S PRIZE MEDAL COTTAGE GRATES AND RANGES.



Sketch of the Prize Cottage Range.

NICHOLSON'S PATENT PRIZE COTTAGE RANGES,

LINED THROUGHOUT WITH FIRE LUMPS,

Which have received the Premiums offered and awarded by the Royal Agricultural Society, at their Meetings held at York in 1849, and Exeter in 1850; also of the Great Exhibition, 1851.

This Cottage Range is on a much improved principle, and is constructed with the strictest regard to durability, economy of fuel, and convenience in use, whilst the greatest simplicity has been attained both in its arrangement and manufacture, whereby the cost scarcely exceeds those of the most common description.

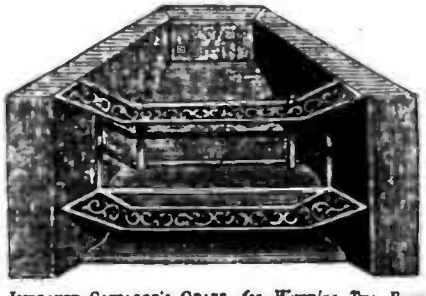
The advantages the Prize Cottage Range possesses over the Ranges generally sold, consist in its great economy, superior efficiency, and great durability.

Prices of the above, for openings of 3 feet wide, 42s.; 3 feet 2 inches wide, 45s.; 3 feet 4 inches wide, 50s.; 3 feet 6 inches wide, 55s.; 3 feet 8 inches wide, 60s.; 4 feet, 65s. Brass Cocks to the above, 4s. 6d. to 6s. extra.

THE ANGLO-GERMAN WARMING AND COOKING STOVE,

Which can be used in any Room, or in the open air, without fixing, and is admirably adapted for Emigrants, &c., &c., &c.

Price, with boiler, 75s.; with oven, and no boiler, 55s.



Sketch of the IMPROVED COTTAGER'S GRATE, *for Warming Two Rooms, as recently furnished to the Model Lodging House, erected for* HIS ROYAL HIGHNESS PRINCE ALBERT, *in Hyde Park, adjoining the Cavalry Barracks.*

PIERCE'S UNIVERSAL FIRE-LUMP GRATES,

AND

IMPROVED COTTAGER'S GRATES,

For which the PRIZE MEDAL was awarded at the GREAT EXHIBITION of 1851, in Hyde Park.

THE IMPROVED COTTAGER'S GRATE, for warming two rooms with only one fire, made of the finest prepared fire-clay, having an air-chamber at the back (from which, by means of a pipe, and the admission of fresh air from the outside), will supply a sufficient degree of healthful warmth to render another room comfortable. This Grate has the additional advantage over the others of a table-bar at the bottom, and a large trivet at the top.

SMALL SIZE, 29 inches, 27s. LARGE SIZE, 32 inches, 30s.

PIERCE strongly recommends these Grates to public notice for COTTAGES, LODGES, ALMS HOUSES, FARM HOUSES, SERVANTS' and other BED ROOMS, OFFICES, &c., as from their durability and economy, they possess many advantages over the common light iron grates that have been hitherto made use of in cottages and bedrooms, the most important of which consist in their comfort and usefulness, combined with the great strength and durability of the material (the best and purest fire-clay), producing a bright and cheerful fire without waste from either ashes or cinders, and will burn wood, coals, coke, or peat.

PRICE:—SMALL SIZE, 24 in. wide, 11s. 6d.; MEDIUM SIZE, 26 in. wide, 13s. 6d.; LARGE SIZE, 28 in. wide, 15s. 6d.

NOTICES OF THE PUBLIC PRESS.

"A Cottager's Grate, on one of the best principles we ever saw, shown by E. PIERCE, at our Agricultural Show, was both cheap and compact."—*Exeter Western Times*, 20th July, 1850.

"The most economical and very best open grates we have seen are an admirable kind manufactured by Mr. PIERCE, of Jermyn-street. We use them ourselves, and find them faultless."—*Gardener's Chronicle*, edited by Dr. Lindley, Nov. 16, 1850.

See also the *Art-Journal*, for Nov. 1850; *Builder and Architect*, for June 1st; *Magazine of Science*, Sept. 1850; *Herapath's Railway Journal*, 28th Sept.; *Journal of Design*, Oct.; *Plymouth and Devonport Journal*, 22nd Aug.; *West of England Conservative*, 11th Sept. 1850, &c. &c. &c.

PIERCE'S MANUFACTORY AND WAREHOUSE, 5, JERMYN-STREET, REGENT-STREET.

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